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| APPLICATION NO.                                            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/830,290                                                 | 04/25/2001  | Janez Pirs           | 38787-171294        | 8253             |
| 26694                                                      | 7590        | 06/14/2005           | EXAMINER            |                  |
| VENABLE LLP<br>P.O. BOX 34385<br>WASHINGTON, DC 20045-9998 |             |                      | LESPERANCE, JEAN E  |                  |
|                                                            |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                            |             |                      | 2674                |                  |

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | Application No.<br>09/830,290  | Applicant(s)<br>PIRS ET AL. |
|------------------------------|--------------------------------|-----------------------------|
| Examiner                     | Art Unit<br>Jean E. Lesperance | 2674                        |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 03 January 2005.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4)  Claim(s) 13-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 15-24 is/are allowed.

6)  Claim(s) 13 and 14 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 03 January 2005 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

**DETAILED ACTION**

1. The amendment to the claims and the specification filed January 3, 2005 is entered and claims 13 to 24 are pending.
2. The amendment to the drawings filed January 3, 2005 is accepted.

**EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Catherine M. Voorhees (Registration No. 33,074) on May 19, 2005.

Please amend claim 13, 15, 17 and 18 as follows:

Regarding claim 13, in line 1, after LCD, add --electrooptic switching element--.

Regarding claim 15, in line 3, after LCD, add --electrooptic switching element--.

Regarding claim 17, in line 3, after LCD, add --electrooptic switching element--.

Regarding claim 18, in line 3, after LCD, add --electrooptic switching element-- and in line 25, after of, delete [of].

The applicant is advised to enter the above amendment in the next response.

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4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 13, the limitation "electric driving signals such as the time integral value Int" is not described anywhere in the specification. The closest quote in the specification that may be close to the above limitation is an LCD electrooptic switching element so that the value of the time integral of the driving voltage but is not the same. Correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13, the limitation "electric driving signals such as the time integral value Int" is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner does not understand if the time integral value Int is a current, voltage, or time.

What is the written definition of "the time integral value"? What is the unit of the time integral value? Correction is required.

***Allowable Subject Matter***

6. Claims 15-24 are allowed.
7. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to the driving method for the LCD electrooptic switching element or LC electrooptic switching element. Independent claim 15 and 17 identify a uniquely distinct feature "a voltage translator, wherein the control signals output by the control "flip/flop" circuit are input to the voltage translator, said voltage translator transforming said control signals into electric driving signals for the electrooptic switching element and outputting the transformed control signals to the electrodes of the electrooptic switching element, the amplitude of said square-wave electric driving signals being determined by a voltage level  $V_{lcd}$ , which is input to a control input of the voltage translator". Independent claim 18 identifies a uniquely distinct feature "a second analog switch having a select input associated with the output of the comparator such that with every change of the polarity of electric driving signals for the electrooptic switching element, said second analog switch switches for a short time to output from an electrically floating first input to a constant electric potential  $V_p$ , at a second input, in order to reset the integrator to an initial state, said analog switching output being input to the integrator and wherein the outputs of the control "flip/flop" circuit are input to the voltage translator, which transforms said control signals into the electric driving signals

for the electrooptic switching element and outputs the transformed control signals to the electrodes of the electrooptic switching element, the amplitude of said driving signals being determined by the electric voltage  $V_{lcld}$ , which is connected to a control input of the voltage translator".

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yatabe (Patent # 6,188,395), Schaller (Patent # 5,689,206) and Yamazaki et al. (Patent # 5,442,370).

The closest arts, Yatabe., Schaller and Yamazaki et al. as discussed above, either singularly or in combination, fail to anticipate or render obvious the above limitations obvious.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the Technology Center 2600 Customer Service Office  
whose telephone number is (703) 306-0377.

Jean Lesperance

*Jean Lesperance*

Art Unit 2674

Date 6/6/2005

*Henry N. Tran*

**HENRY N. TRAN  
PRIMARY EXAMINER**